Audit Report

YEAR 2000 ISSUES WITHIN U.S. SPECIAL OPERATIONS COMMAND AND ITS COMPONENT COMMANDS

Report No. 99-240 August 23, 1999

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Acronyms

AFSOC	Air Force Special Operations Command
CCI	Command Control and Information
NAVSPECWARCOM	Naval Special Warfare Command
POAS	Enhanced Psychological Operations Automated System
SOC	Special Operations Command
USASOC	U.S. Army Special Operations Command
USSOCOM	U.S. Special Operations Command
Y2K	Year 2000

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202

August 23, 1999

MEMORANDUM FOR COMMANDER IN CHIEF, U.S. SPECIAL OPERATIONS COMMAND
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, JOINT STAFF
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Year 2000 Issues Within U.S. Special Operations Command and Its Component Commands (Report No. 99-240)

We are providing this report for review and comment. This is a follow-on audit to Inspector General, DoD, Report No. 98-129, "U.S. Special Operations Command Year 2000 Issues," May 8, 1998. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly and there is special urgency regarding year 2000 conversion issues. Comments from U.S. Special Operations Command regarding reconciling the difference between the Command Control and Information contractors and U.S. Special Operations Command reporting, and ensuring that the remaining 10 U.S. Special Operations Command managed mission-critical systems meet DoD and Joint Staff guidance were partially responsive. Comments from the Joint Staff regarding the reporting by Special Operations Commands attached to geographical unified commands of their year 2000 status and operational evaluation results were nonresponsive. As a result of U.S. Special Operations Command comments, we deleted one recommendation. We request that the U.S. Special Operations Command provide additional comments on reconciling system reporting and ensuring all mission-critical systems meet guidance, and that the Joint Staff provide additional comments on reporting by Special Operations Commands attached to the geographical unified commands. We request that the U.S. Special Operations Command and the Joint Staff provide comments as requested in the Finding section by September 22, 1999.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Harlan M. Geyer at (703) 604-9593 (DSN 664-9593), email hgeyer@dodig.osd.mil, or Mrs. Jean M. Jackson-Herrin at (703) 604-9490 (DSN 664-9490), email jjackson@dodig.osd.mil. See Appendix C for the report distribution, which includes all unified commands so that self-evaluations of year 2000 readiness can be facilitated. Audit team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. 99-240 August 23, 1999
(Project No. 9LA-5033)

Year 2000 Issues Within U.S. Special Operations Command and Its Component Commands

Executive Summary

Introduction. This is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the year 2000 (Y2K) computing challenge. For a listing of audit projects addressing the issue, see the Y2K web pages on the IGnet at http://www.ignet.gov/.

Objectives. This is a follow-on audit to Inspector General, DoD, Report No. 98-129, "U.S. Special Operations Command Year 2000 Issues," May 8, 1998. The overall audit objective was to evaluate the ability of the U.S. Special Operations Command (USSOCOM) to resolve Y2K issues to avoid undue impairment of its mission.

Results. The USSOCOM headquarters was making progress in addressing its Y2K problems. However, the level of Y2K efforts within USSOCOM and its Component commands varied in scope and was still evolving. USSOCOM had not developed an adequate control process for its Y2K program. USSOCOM and its Component commands were not adequately reporting their mission-critical and thin-line systems. USSOCOM had not provided adequate guidance for planning and testing criteria of its owned mission-critical systems. Additionally, the Command must coordinate within all the Components of USSOCOM to ensure that all Y2K problems within the Command are resolved. To mitigate risk, USSOCOM and its Component commands must intensify their efforts in the limited time remaining before the year 2000. See the Finding section of this report for details.

Summary of Recommendations. We recommend that the Commander in Chief, USSOCOM monitor the reporting of, ensure accuracy and compliance of, and adequately report all mission-critical systems that USSOCOM manages and supporting systems in accordance with the DoD Y2K Management Plan; validate the consistency, compliancy and reporting criteria between USSOCOM, U.S. Army Special Operations Command, and the U.S. Army; report documented status of USSOCOM thin-line systems in the Joint Staff Commander in Chief Thin Line System List; reconcile the difference between the Command Control and Information contractor and USSOCOM reporting of the Y2K status of mission-critical systems; continue to identify interfaces for the mission-critical systems and tracking the interfaces operational evaluation testing requirement; develop and obtain contingency plans for the identified mission-critical systems to include USSOCOM managed systems and supporting systems from the subordinate commands; develop continuity of operations plans for all missions; ensure that the 10 USSOCOM managed mission-critical systems not included in the operational evaluations meet the DoD Y2K Management Plan requirements; and accelerate planning of operational evaluations and provide planning information to Component commands to facilitate resolution of planning and funding problems at the Service level. We recommend that the Director, Joint Staff require the Special Operations Commands

attached to the geographical unified commands to report monthly their Y2K status and operational evaluation results. We recommend that the Deputy Commanding General, U.S. Army Special Operations Command; the Commander, Naval Special Warfare Command; and the Commander, Air Force Special Operations Command continue to monitor the non-Y2K compliant mission-critical systems; obtain all contingency plans for the systems that are mission critical; and obtain unit continuity of operations plans for missions affected by Y2K problems. We recommend that the Commander, Naval Special Warfare Command reevaluate the Naval Special Warfare Command mini-operational evaluation against the DoD Y2K Management Plan, Appendix I, requirements. We recommend that the Commander, Air Force Special Operations Command continue functional end-to-end testing of Air Force Special Operations Command aircraft and apply lessons learned in planning for Service-level integration tests.

Management Comments. USSOCOM concurred with all the recommendations except for reconciling the reporting of the Y2K status of mission-critical systems between the Command Control and Information contractor and USSOCOM and for expediting planning of operational evaluations and providing planning information to the Component commands to facilitate resolution of planning and funding. USSOCOM stated that there were no inconsistencies with the reporting. USSOCOM also stated that the planning issues have been resolved, stating that three operational evaluations were completed, and they are executing the fourth and planning the fifth. The Joint Staff neither concurred nor nonconcurred, stating that USSOCOM will evaluate the special operations missions during its five scheduled operational evaluations. USSOCOM, responding for the U.S. Army Special Operations Command, the Naval Special Warfare Command, and the Air Force Special Operations Command, concurred with the majority of the recommendations and provided details on efforts to continue monitoring all non-Y2K compliant systems through the last designated critical date; to aggressively pursue obtaining system contingency plans from the respective program managers; and, as appropriate, to conduct functional integration testing employing all thin-line systems. USSOCOM, responding for the Naval Special Warfare Command, also concurred with the recommendation to reevaluate the adequacy of the integration testing completed on its thin-line systems. USSOCOM, responding for the Air Force Special Operations Command, nonconcurred with the recommendation for continuing functional end-to-end testing of the Air Force Special Operations Command aircraft and applying lessons learned in Service-level integration tests, stating that comprehensive functional end-to-end tests have been completed and lessons learned shared. A discussion of management comments is in the Finding section of the report and the complete text is in the Management Comments section.

Audit Response. Regarding the comments directed to the U.S. Army Special Operations Command, the Naval Special Warfare Command, and the Air Force Special Operations Command, the USSOCOM comments were fully responsive and no additional comments are required. As a result of management comments, we deleted one recommendation to the Naval Special Warfare Command. Comments from USSOCOM regarding reconciling the difference between the Command Control and Information contractor and USSOCOM reporting and ensuring that the remaining 10 USSOCOM managed mission-critical systems meet DoD and Joint Staff guidance were partially responsive. Comments from the Joint Staff regarding the reporting by Special Operations Commands attached to geographical unified commands of their Y2K status and operational evaluation results were nonresponsive. We request that USSOCOM and the Joint Staff provide comments on the final report by September 22, 1999.

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Background

Because of the potential failure of computers to run or function throughout the Government, the President issued an Executive Order, "Year 2000 Conversion," February 4, 1998, making it policy that Federal agencies ensure that no critical Federal program experiences disruption because of the year 2000 (Y2K) problem. The Executive Order also requires that the head of each agency ensure that efforts to address the Y2K problem receive the highest priority attention in the agency.

DoD Y2K Management Strategy. In his role as the DoD Chief Information Officer, the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) is coordinating the overall DoD Y2K conversion effort. The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) issued various iterations of a Y2K management plan to provide direction and make the DoD Components responsible for implementing the five-phase Y2K management process. The "DoD Year 2000 Management Plan, Version 2.0" (DoD Management Plan), December 1998, is the most current iteration. The target completion date for implementation of mission-critical systems was December 31, 1998, and for non-mission-critical systems was March 31, 1999.

Joint Chiefs of Staff. The Chairman of the Joint Chiefs of Staff is the principal military adviser to the President, the Secretary of Defense, and the National Security Council. The Joint Chiefs of Staff have no executive authority to command the combatant forces. The Secretaries of the Military Departments assign all forces under their jurisdiction to the unified commands to perform missions assigned to those commands. The Joint Staff assists the Chairman of the Joint Chiefs of Staff with unified strategic direction of the combatant forces, unified operation of the combatant commands, and integration into an efficient team of air, land, and sea forces.

The "Joint Staff Year 2000 Action Plan," (the Action Plan) March 1998, provides the unified commands and Joint Staff directorates with the corporate strategy and management approach for addressing the Y2K problem. The Action Plan uses the same target completion date for the implementation phase as the DoD Management Plan. The goal of the Action Plan was to have all warfighting (mission-critical) systems certified as Y2K compliant not later than December 31, 1998.

Army. The United States Army "Operation Order (OPORD) 99-01," (Millennium Passage), January 4, 1999, provides guidance to Army Components on how to demonstrate their ability to accomplish critical missions in an operational environment beyond the year 2000. The Millennium Passage

identified five phases of systems assessments, such as functional end-to-end tests[1] and Commander in Chief Operational Evaluations, to demonstrate the Army's ability to carry out critical mission functions in a Y2K environment.

Air Force. The "United States Air Force Year 2000 Assessment Master Plan for Operations," (the Assessment Master Plan) January 1, 1999, provides Air Force Components with an overall approach for assessment and remediation of Y2K vulnerability. The Assessment Master Plan also provides guidance for end-to-end multiple system interface assessment and large-scale exercises. These exercises will evaluate the "thin line" of systems critical to the performance of operational missions.

U.S. Special Operations Command. The U.S. Special Operations Command (USSOCOM) is one of nine unified commands in DoD. The USSOCOM was activated on April 16, 1987 as a result of the Cohen-Nunn amendment to the National Defense Authorization Act for FY 1987. The overall mission of USSOCOM is to prepare special operations forces to successfully conduct worldwide special operations, civil affairs, and psychological operations in peace and war in support of regional combatant commanders, American ambassadors and their country teams, and other Government agencies.

Congress created USSOCOM to correct serious deficiencies in the United States' ability to conduct special operations and engage in low-intensity conflict activities. USSOCOM was assigned Service-like responsibilities of training, ensuring combat readiness, monitoring personnel promotions and assignments, and developing and acquiring special operations forces-peculiar equipment. USSOCOM was also given responsibility for managing a separate major force program to ensure that the special operations forces program has visibility at the DoD and congressional levels. The four Component commands of USSOCOM are the U.S. Army Special Operations Command (USASOC), the Naval Special Warfare Command (NAVSPECWARCOM), the U.S. Air Force Special Operations Command (AFSOC), and the Joint Special Operations Command. Additionally, USSOCOM developed Special Operations Commands (SOCs), established as a subunified command of the combatant unified commands. The SOCs are the geographic commanders in chief source of expertise in all areas of special operations, providing the commanders in chief with a separate element to plan and control the employment of joint special operations forces in military operations. Although USSOCOM provides funding and personnel for the SOCs, each SOC reports directly to the geographic commanders in chief. The commander of the theater special operations command is responsible to the geographic commanders in chief for planning and conducting joint special operations in the theater, ensuring special operations forces for joint special operations and advising the commanders in chief and their component commanders in theater on the proper employment of special

[1]The Department of the Army has defined end-to-end tests as a complete flow of data through a set of interconnected systems that performs a core business process, function, or mission.

operations forces. The following unified and subunified commands have SOCs: U.S. Atlantic Command, U.S. Central Command, U.S. European Command, U.S. Pacific Command, U.S. Southern Command, and U.S. Forces, Korea.

Objectives

This is a follow-on audit to Inspector General, DoD, Report No. 98-129, "U.S. Special Operations Command Year 2000 Issues," May 8, 1998. The overall audit objective was to evaluate the ability of the USSOCOM to resolve Y2K issues to avoid undue impairment of its mission. See Appendix A for a discussion of the audit scope and methodology and Appendix B for a summary of prior coverage.

Status and Coordination of Year 2000 Issues Within U.S. Special Operations Command

USSOCOM refined its overall Y2K efforts and was making progress in addressing its Y2K problems. However, the level of Y2K efforts within USSOCOM and its Component commands varied in scope and were still evolving. The adequacy of the identification process of mission-critical systems varied among USSOCOM and its Component commands. USSOCOM and its Component commands had not adequately developed contingency and continuity of operations plans for systems and missions that may be affected by Y2K problems. The Component commands had engaged in integration testing of mission-critical systems; however, the level and adequacy of the testing varied. Coordination among USSOCOM and its Component commands must improve to ensure that all Y2K problems are resolved. To mitigate risk, USSOCOM and its Component commands must intensify their efforts in the limited time remaining before the year 2000.

USSOCOM Y2K Efforts

USSOCOM headquarters had refined its overall Y2K efforts and continued to make progress in addressing its Y2K problems. From October 1997 through January 1998, the Inspector General, DoD, conducted an audit to evaluate the status of the progress of USSOCOM in resolving its Y2K computing issues. Inspector General, DoD, Report No. 98-129, "U.S. Special Operations Command Year 2000 Issues," May 8, 1998, made numerous recommendations to USSOCOM and the Joint Staff. USSOCOM and the Joint Staff concurred with the recommendations. USSOCOM was incorporating actions necessary to implement those recommendations into its overall Y2K efforts.

The actions USSOCOM had taken in response to that audit included:

- updating the draft "United States Special Operations Command Year 2000 Management Plan (USSOCOM Y2K Management Plan)," November 19, 1998, which is based on the DoD Management Plan and the Action Plan;

- continuing to identify and redefine the mission-critical systems used by USSOCOM;

- developing contingency plans for mission-critical systems; and

- planning operational evaluations to verify that USSOCOM can perform warfighting missions, functions and tasks in a Y2K environment.

USSOCOM and Its Component Commands Management of Y2K Efforts

The status of the Y2K efforts of USSOCOM and its Component commands varied. USSOCOM had formed a full-time Y2K task force and contracted for additional support to accelerate its Y2K effort. To address the Y2K problem, each of the USSOCOM Component commands had established an individual Y2K program. Some developed formal Y2K plans with personnel dedicated solely to Y2K efforts and others operated their programs informally with personnel assigned as an additional duty. The USSOCOM subunified commands were not reporting their Y2K progress to USSOCOM headquarters; however, they were reporting to their respective unified commands.

USSOCOM Task Force. USSOCOM formed a full-time Y2K task force composed of systems operators, planners, and technical experts from across the staff to accelerate and better focus the overall USSOCOM Y2K effort. The Y2K director within the Intelligence and Information Operations Directorate is the lead for the USSOCOM Y2K task force. The overall goal is for USSOCOM and its Component commands to ensure that all mission-critical systems meet the Y2K standards of compliance precluding any failure that might occur due to Y2K related problems. The principal USSOCOM Y2K effort includes extensive contingency planning and operational evaluations. As of January 11, 1999, the USSOCOM headquarters task force comprised 10 military personnel. The USSOCOM Component Y2K task forces consisted of: USASOC with three full-time military, one civilian and six contractor personnel; NAVSPECWARCOM with two part-time military and five contractor personnel; and AFSOC with four full-time military and six contractor personnel.

USSOCOM Contract Support for Y2K. USSOCOM had augmented its Y2K efforts with two contracts. The contract with Command Control and Information (CCI) required that it provide engineering and support services in the areas of project management; analysis, database management, planning, oral and graphic presentations, review, technical research, and web site development; Special Operations Forces Command, Control, Communications and Computer, and intelligence information systems architectural planning and design; and general staff support in accordance with USSOCOM and the DoD Management Plan. According to the contract, CCI:

- should configure the Y2K database to provide access to personnel identified by the Government.

- shall ensure that quality assurance activities are performed at all levels of the USSOCOM Y2K Management Plan.

- may be required to research, analyze, and review applicable USSOCOM, Service, agency, and vender documentation and application to assess Y2K vulnerabilities, status, compliance, and timelines.

- shall provide technical reviews for all USSOCOM managed systems to ensure that the systems have been properly processed as required by the DoD Management Plan.

- shall assess capabilities of equipment and systems to interoperate or to identify incompatibilities negating the capabilities as a result of ongoing Y2K renovations.

- shall research, analyze, test, and evaluate Y2K compliance status on current and future USSOCOM internal applications and USSOCOM managed systems.

There are 18 CCI personnel assigned to Headquarters, USSOCOM. The USASOC was augmented with three CCI individuals, the NAVSPECWARCOM had three CCI individuals on site, and the AFSOC had one CCI individual assigned to the Y2K program office in the operations directorate of AFSOC headquarters and two personnel assigned to the 16th Special Operations Wing.

The second USSOCOM contract was with Keane Federal Systems, Inc. The Keane Federal Systems, Inc. is required to provide a combination of Y2K skills: analysis, computer engineering, coordination, execution, exercise planning, problem resolution, and reporting. Additionally, the contract tasks include providing technical information to USSOCOM in support of USSOCOM Y2K interoperability exercises. Further, Keane Federal Systems, Inc. is to provide joint Y2K exercise planning (for example, operational evaluation) and technical support for all USSOCOM managed and supporting systems to be employed in the operational evaluations. The contract also requires Keane representatives to review systems contingency plans for USSOCOM mission-critical systems and determine their effectiveness in a Y2K corrupted environment.

USSOCOM was beginning its operational evaluations and the Keane contractor was supporting that function. As of March 19, 1999, Keane had 18 personnel assigned to USSOCOM headquarters, two individuals with USASOC, two individuals with NAVSPECWARCOM, and three individuals with AFSOC who were working in the Y2K program office in the operations directorate.

USSOCOM Y2K Program. The USSOCOM Y2K program was focused on nine core missions.

- Counterproliferation of Weapons of Mass Destruction
- Combating Terrorism
- Foreign Internal Defense[2]
- Special Reconnaissance
- Direct Action
- Psychological Operations
- Civil Affairs
- Unconventional Warfare
- Information Operations

The USSOCOM Y2K task force developed the USSOCOM Y2K Management Plan to guide a comprehensive and coordinated effort to ensure command attention and effective application of funds, personnel, and technical resources to the Y2K effort. The USSOCOM Y2K Management Plan identifies key actions and milestones; offices of primary responsibility; and estimated completion dates for Y2K operational evaluations, Joint Staff contingency assessment, and technical compliance activity. The USSOCOM Y2K Management Plan stated that the plan applied to all automated information systems, communications devices, interfaces for communications devices, and any other system or equipment with embedded microprocessors within these organizations. The USSOCOM Y2K Management Plan also stated that the plan applies to all USSOCOM organizations and the SOCs.

USASOC Program. To address the Y2K problem, USASOC established a formal Y2K program. In February 1998, the USASOC established a Y2K task force with the appointment of a Chief, Y2K Task Force. In March 1999, USASOC restructured its Y2K task force to better meet the needs of USASOC. The USASOC Deputy Commanding General was placed in charge of the Y2K task force with the Deputy Chief of Staff, Information Management, and the Deputy Chief of Staff, Operations, as co-directors. In addition, USASOC assigned a project officer with oversight of multiple assistance teams for command, control, communication, computer and intelligence; command and control network; engineering; logistics intelligence; psychological

[2] Foreign Internal Defense mission is to advise, assist, organize, and train host nation military and paramilitary forces to enable these forces to free and protect their society from insurgency, lawlessness, and subversion.

operations; strategic planning; strike and engagement; and test and evaluation. The project officer also was responsible for ensuring the Y2K compliance of infrastructure, the Special Warfare School, and subordinate units.

The USASOC Y2K task force developed an implementing plan to the USSOCOM Y2K Management Plan for each of its commands. The implementing plan contained the USSOCOM Y2K Management Plan; assistance information; checklists that must be accomplished for the awareness, assessment, renovation, validation, and implementation phases; Y2K project schedule completion dates; and USASOC points of contact. The Y2K task force trained over 100 individuals to serve as Y2K points of contact in the USASOC subordinate units who assisted in establishing inventories, thin lining systems, and providing know how for units to complete the USASOC phase checklist and become Y2K compliant. Finally, the USASOC Y2K task force has been assisting units in writing contingency plans for any possible Y2K failures.

NAVSPECWARCOM Program. To address the Y2K problem, NAVSPECWARCOM established a Y2K program. However, NAVSPECWARCOM had not formalized the program in a published Y2K plan or strategy. Although NAVSPECWARCOM did not have dedicated full-time military or Government personnel assigned to its Y2K program, NAVSPECWARCOM did have dedicated full-time contractor personnel performing its Y2K program efforts. NAVSPECWARCOM had two military personnel working Y2K as an additional duty, a communications official (N-6) was responsible for working the systems Y2K issues and an operations official (N-3) was responsible for working the integration and operational evaluation requirements for NAVSPECWARCOM Y2K issues.

NAVSPECWARCOM had implemented the USSOCOM Y2K Management Plan. However, NAVSPECWARCOM had not developed its own strategic plan for Y2K issues. Unlike USASOC and AFSOC using the respective Service Y2K guidance, NAVSPECWARCOM also was not implementing the "Department of the Navy Year 2000 Action Plan," September 1998, version 1.4.

AFSOC Program. To address the Y2K problem, AFSOC established a formal Y2K program. AFSOC had developed a formal organizational structure to process and address its Y2K issues, and had effectively integrated communications as well as operations personnel into the management of their Y2K program. AFSOC established a Y2K steering group and a Y2K program office to manage and coordinate all Y2K actions. The director of the Y2K steering group was the Chief of Operations, Plans, Tactics and Requirements and the co-director was the Director of Communications and Information. In addition, representatives from the headquarters functional directorates and each subordinate command, to include the Air Force Reserve components, were represented in the steering group. The AFSOC Y2K program office was staffed with dedicated personnel responsible for managing and coordinating Y2K actions within AFSOC. AFSOC also established a Y2K program management office at the wing level to manage the Y2K efforts of the wing and squadrons,

specifically installation certification and continuity of operations plan development. Prior to the establishment of this office, the wing's Y2K program was embedded in the communications squadron.

Although required by USSOCOM, AFSOC did not develop an organizational Y2K management plan or strategy. According to AFSOC representatives, AFSOC used the Assessment Master Plan to direct its efforts. While the Assessment Master Plan provides an overall approach to developing Y2K assessments, AFSOC did not identify specific actions and strategy that would be used to accomplish the plan.

USSOCOM and its Component Command Mission-Critical Systems Identification and Thin Lining

Although USSOCOM and its Component commands had engaged in identifying and inventorying mission-critical information systems, the adequacy of the identification process varied. USSOCOM and its Component commands had developed a mission-critical systems list based on the USSOCOM nine core missions. The development of thin lines, however, varied between USSOCOM and its Component commands. In some cases, the mission-critical systems lists were refined to include only the necessary thin-line systems, others had made no differentiation between their original mission-critical system and thin-line systems.

USSOCOM Critical Missions and Functions Thin-line Approach. USSOCOM had identified its critical missions, functions, and tasks. Those critical missions, functions, and tasks were derived from the Joint Strategic Capabilities Plan and the associated Joint Mission Essential Task Listing. USSOCOM has defined mission-critical systems as:

> . . defined by the Clinger/Cohen Act as National Security Systems (NSS) Intelligence Activities; Cryptologic Activities related to National Security; Command and Control of military forces, integral to a weapon or weapon system; systems critical to direct fulfillment of military or intelligence missions.

USSOCOM defined the thin line of systems as ". . . a subset of a system of systems. The minimum number of integrated automated information platforms/systems required to perform a critical task or mission."

Variations were identified in the number of systems being tracked by USSOCOM and its Service Component commands. USSOCOM made a distinction between systems owned and managed by the command and all other systems owned and managed by the parent Service headquarters, and DoD agencies. A USSOCOM official stated that USSOCOM identified and was tracking 30 mission-critical systems it had managed. Of the 30 USSOCOM mission-critical systems, 20 were identified as thin-line systems. As of

June 7, 1999, 17 of the 20 thin-line USSOCOM managed systems were identified as Y2K compliant and 3 thin-line USSOCOM managed systems were not Y2K compliant. The official further stated that the mission support systems category reflected 261 mission-critical systems that were managed by Service headquarters or DoD agencies. The mission support systems are not mission critical to USSOCOM headquarters but are mission-critical systems to its Component commands to accomplish their tasks. However, the 261 systems reported by USSOCOM did not match the 178 mission-critical mission supporting systems contained in the Component commands' databases of systems. Additionally, USSOCOM had identified 112 mission supporting systems as thin-line systems. However, the Component commands were reporting 104 mission supporting systems as thin-line systems. As a result, USSOCOM was reporting more mission-critical and thin-line mission supporting systems than the number of systems that its Component commands had identified.

USASOC. Because of the lack of early guidance from USSOCOM, the USASOC thin line of mission-critical systems had fluctuated between 20 and 135 systems. As of March 31, 1999, USASOC had identified 61 mission-critical systems.[3] Of the 61 mission-critical systems, 11 were managed by USSOCOM and thin lined. As of March 31, 1999, 8 of the 11 mission-critical thin-line systems were Y2K compliant, and 3 were not Y2K compliant. Of the 61 mission-critical systems, 50 were identified as mission supporting systems that were not owned by USSOCOM but required by USASOC to accomplish its missions. As of March 31, 1999, 36 of the 50 mission-critical systems were Y2K compliant and 14 were not Y2K compliant. Of the 50 mission-critical systems, only 28 were identified on the USASOC thin-line systems. As of March 31, 1999, 24 of the 28 thin-line systems were Y2K compliant and 4 were not Y2K compliant. USASOC officials stated that there was a conflict between the methods used by the Army, USSOCOM, and USASOC for identifying a system as compliant. The Army reported systems as compliant if they knew how to fix it and if its fielding was on schedule. USSOCOM indicated that a system was compliant if it was fixed, without necessarily being fully fielded. USASOC did not believe a system was compliant until it was fixed and all modifications were fielded. As a result, an Army system may have been identified as Y2K compliant; however, USASOC may have been using the same system without testing the Y2K modifications. For example, USSOCOM considered the Enhanced Psychological Operations Automated System (POAS) Y2K compliant. However, USASOC maintained in March 1999 that only the POAS system at USSOCOM was compliant because USASOC had not received the necessary modifications to make its POAS system Y2K compliant. On April 27, 1999, USSOCOM stated, ". . . the POAS system was presented to the USSOCOM Y2K Steering Groups as completed on March 31, 1999, and was approved." In the April 1999 system status report to the Joint Staff, USSOCOM reported the system as compliant.

[3] USASOC used the Army term "thick line" to identify mission-critical systems. On April 27, 1999, USSOCOM stated, "USASOC identified 39 mission-critical systems—34 compliant and 5 not compliant "

NAVSPECWARCOM. Because of a lack of early guidance from USSOCOM, NAVSPECWARCOM identified its mission-critical and thin-line systems based on the three main phases of executing a mission (pre-mission, during mission, and post-mission) and mission assignment requirements. As of March 31, 1999, NAVSPECWARCOM identified 24 mission-critical systems. Of the 24 mission-critical systems, 3 were managed by USSOCOM and thin-lined. As of March 31, 1999, 2 of the 3 mission-critical thin-line systems were Y2K compliant, and 1 system was not Y2K compliant. Of the same 24 mission-critical systems, the remaining 21 were identified as mission supporting systems that were not owned by USSOCOM but required by NAVSPECWARCOM to accomplish its missions. As of March 31, 1999, 17 of the 21 mission-critical systems were Y2K compliant and 4 were not Y2K compliant. NAVSPECWARCOM had identified those 21 mission-critical systems as thin-line systems. NAVSPECWARCOM included on its thin line, systems with a Y2K vulnerability that were critical in movement to and from the operating area (infiltration and exfiltration), reconnaissance and surveillance, operational planning, and communications related to command and control. The USSOCOM mission-critical supporting list did not reflect the various NAVSPECWARCOM Y2K mission-critical systems. For example, NAVSPECWARCOM identified the following mission-critical systems as part of the MARK V Combat Craft: data controller, engine control system, and a fuel management system. As of March 3, 1999, however, USSOCOM was identifying only the engine control system in the MARK V as mission critical. On April 27, 1999, USSOCOM indicated that it had updated its database to reflect the two remaining systems as mission-critical thin-line systems.

AFSOC. Because of the lack of early guidance from USSOCOM, AFSOC developed its mission-critical list to include automated information systems, weapon systems, and aircraft. As of March 31, 1999, AFSOC had identified 113 total mission-critical systems. Of the 113 mission-critical systems, USSOCOM managed 6 and they were thin-lined. As of March 31, 1999, 4 of the 6 mission-critical thin-line systems were Y2K compliant, and 2 systems were not Y2K compliant. Of the 113 mission-critical systems, 107 were identified as mission supporting systems that were not owned by USSOCOM but required by AFSOC to accomplish its missions. As of March 31, 1999, 61 of the 107 mission-critical systems were Y2K compliant and 46 were not Y2K compliant. Of the 107 mission-critical systems, only 55 were identified on the AFSOC thin line of systems. As of March 31,1999, 35 of the 55 thin-line systems were Y2K compliant and 20 were not Y2K compliant. AFSOC Y2K program management representatives indicated that the list was not finalized and that adjustments were made on a daily basis. AFSOC had identified the Theater Battle Management Core System as mission critical. However, because of the delay in fielding the system, AFSOC was unable to test that portion of its operations.

USSOCOM Reporting of Systems. As previously discussed, the accuracy of the USSOCOM Y2K system database was questionable. As a result, there was inconsistent reporting of mission-critical or thin-line systems to the Joint Staff. The Joint Staff developed the Commander in Chief Thin Line System List to

track the respective commanders in chief thin-line systems. Table 1 shows that between March 3 and March 19, 1999, USSOCOM changed the number of supporting systems and thin lines reported.

Table 1. USSOCOM Mission-Critical and Thin-Line Systems

	Total Number of Supporting Systems	Mission Critical	Thin-Line Systems
March 3, 1999	411	Unknown	89
March 19, 1999	458	261	112

The March 12, 1999, Draft Commander in Chief Thin Line System List identified only 44 thin-line systems for USSOCOM because updated information was not being provided or timely updated on the Joint Staff report. As a result, within a 3-week period, the USSOCOM thin-line systems drastically varied from 44 to 112 systems. This could affect the actual number of thin-line systems to be evaluated in the USSOCOM operational evaluation because the Thin Line System List was to be used to ensure that each system was included in at least two operational evaluations. On June 6, 1999, USSOCOM stated,

> . the USSOCOM portion of the 12 March Joint Staff Thin Line List was grossly misinterpreted by the Joint Staff members . only [the] unclassified portions of the USSOCOM list were included in the 12 March draft report. The bulk of the USSOCOM list, communicated to the Joint Staff via classified traffic, was not included in the report. As a result, the Joint Staff underreported USSOCOM's portion . . . . USSOCOM has fielded the Y2K database to all components and to each of its contract support teams. This will allow greater synchronization of data and accuracy in reporting.

USSOCOM Due Diligence Process. USSOCOM was not adequately tracking and reporting the status of USSOCOM managed mission-critical systems to the Joint Staff. To implement the DoD Management Plan, USSOCOM broke out the USSOCOM Y2K Management Plan program into five phases: awareness, assessment, renovation, validation, and implementation. The USSOCOM Y2K Management Plan requires that as each of the phases is completed, an exit requirement sheet be filed that includes signatures of the program manager, compliant certification officer, Y2K team leader, and Y2K systems project officer. At the final stage of completion, signatures of the program manager and Y2K team representative are required. The USSOCOM Steering Committee must perform a complete system review and sign the final exit sheet. For the 30 USSOCOM systems, the CCI Y2K support team created the Due Diligence process to track the status of the USSOCOM systems' Y2K compliance. The Due Diligence process also required the review of all contingency plans and interface agreements for each of the USSOCOM systems.

USSOCOM separately identifies what phase a system is in and reports system status to the Joint Staff every month. However, Table 2 shows that the USSOCOM and the CCI databases did not agree on what phase USSOCOM systems had completed and whether or not interface agreements and contingency plans were completed.

Table 2. Status of Systems Reported by USSOCOM and CCI*

	USSOCOM	CCI
Phase 1. Awareness	33	21
Phase 2. Assessment	32	20
Phase 3. Renovation	22	19
Phase 4. Validation	18	16
Phase 5. Implementation	14	13
Interface Agreements	16	9
Contingency Plans	25	16

*Analysis was based on USSOCOM initial identification of 33 mission-critical systems. USSOCOM has reduced its mission-critical systems to 30 systems; however, documentation was not provided to identify the 3 removed systems

As of January 13, 1999, a review of the Due Diligence reports indicated that USSOCOM had been reporting systems in phases higher than what their documentation could support. Specifically, USSOCOM had reported 14 systems in a higher phase than their documentation supported. In addition, the documentation for 11 systems were missing the signatures from the program manager, compliant certification officer, Y2K team leader, and Y2K systems project officer for the completion of the exit criteria. For example, the AC-130U gunship aircraft test bed physically simulates navigator and fire control officer crewstations within the aircraft's Battle Management Center. The test bed simulates form, fit, and functions, as well as the performance characteristics of the actual crewstation within the Battle Management Center, including environmental effects. A December 21, 1998 document, AC-130U Test Bed program, Appendix F: Validation Plan and Results, stated, ". . . no testing could be carried out on the system (AC-130U gunship aircraft test bed) that would cause any risk to the normal training schedule." The document also stated that a preliminary final report would be completed on December 23, 1998, and presented to the Steering Group for approval. However, the

document further stated that any Y2K compliance testing would only be preliminary because the Digital Radar Land Mass Systems, Image Generator, and Battle Management Center still required renovations. The final test report, after all renovations were scheduled to be completed, was not due until May 17, 1999. Nevertheless, USSOCOM reported the AC-130U gunship aircraft test bed as Y2K compliant in its December 31, 1998, report. As of April 8, 1999, USSOCOM was still reporting the AC-130U gunship aircraft test bed as Y2K compliant although it needed renovations.

In another example, the PRIVATEER, a USSOCOM managed system, was reported in the validation phase, with none of the exit criteria forms from the previous three phases completed. The PRIVATEER comprised communication intelligence and electronic intelligence subsystems installed aboard Patrol Coastal and MARK V naval surface crafts. A December 23, 1998, letter from the program manager stated that the PRIVATEER was assessed with respect to Y2K compliance by Space and Naval Warfare Systems Command-Charleston in early 1998. Engineering and test analysis revealed that the electronic intelligence subsystem (CONDOR) did not process 4-digit date information and that the archival processes for intercept activity could potentially preclude an analyst from correctly retrieving database information. The letter stated that the installation of the replacement system would not be completed until December 1999. However, on December 31, 1998, USSOCOM reported the PRIVATEER in the validation phase, although a USSOCOM official agreed that the system should be reported in the assessment phase. In a January 1999 mini-operational evaluation, NAVSPECWARCOM tested the PRIVATEER and the system received an unsatisfactory rating. NAVSPECWARCOM reported that the PRIVATEER was awaiting additional Y2K compliant software. As of April 8, 1999, USSOCOM was reporting PRIVATEER in the validation phase with expected completion in December 1999. On June 2, 1999, USSOCOM stated,

> . . . PRIVATEER experienced difficulties with its proposed solution during validation testing. The PM [program manager] adopted a technical solution that could be quickly validated but would extend full implementation. This course of action was briefed to the Steering Group and approved. The Group did not see a need to move the program backward in the five-phased process.

USSOCOM Mission-Critical Interface Agreements. USSOCOM had not identified and obtained all interface agreements nor identified how it planned to test the system interfaces. As of March 31, 1999, USSOCOM had identified 122 interfaces associated with its 290 mission-critical systems. A USSOCOM official stated that only 38 of the 122 interfaces were external interfaces that processed date data, thereby requiring memorandums of agreement. As of March 31, 1999, USSOCOM had 37 of the 38 external interface memorandums on hand. One system was still being researched. USSOCOM had not completed identifying all of the interfaces or routers for mission-critical supporting systems. Although USSOCOM had identified 122 interfaces, it had not identified how it planned to test the interfaces. For example, NAVSPECWARCOM had not inquired about the interface requirements with

Navy ships that would carry NAVSPECWARCOM units. A NAVSPECWARCOM official stated that the units would rely on either their own radios, that do not have day and time code, or the ships' communication systems. The official also stated that NAVSPECWARCOM personnel were not concerned about the ships' Y2K status because they would follow the continuity of operations plans developed for the ship if problems were to occur. On April 27, 1999, USSOCOM stated ". . . with regard to NAVSPECWARCOM interface with Fleet ships, Patrol Coastal ships have played a major part in the integration testing to date." USSOCOM further stated that NAVSPECWARCOM participated in the continuity of operations plans conference hosted by the Second Fleet Commander. On June 2, 1999, USSOCOM stated,

> . . . USSOCOM does not have visibility of all interfaces for all of the mission critical supporting systems. Although many of the service and agency databases indicate that a particular system has interfaces, not all databases list the interfaces or their compliance status. In the majority of cases, the databases do not list interfaces. It should also be noted that a substantial portion of the USSOCOM mission critical supporting systems do not appear in the service and agency databases.

Contingency Plans and Continuity of Operations Plans

USSOCOM and its Component commands had not adequately developed contingency and continuity of operations plans for systems and missions that may be affected by Y2K problems. Y2K contingency planning addressed two areas of risk: known or suspected sources of disruption and unknown or unforeseen disruption. The DoD Management Plan defines the following categories for system plans:

- System Contingency Plan – A system contingency plan is the responsibility of the system manager or owner. The system contingency plan is to address the processes and procedures for fixing systems that have been disrupted.

- Operational Contingency Plan – An operational contingency plan needs to be developed by the group or commanding officer(s) responsible for executing core mission processes. The operational contingency plan identifies alternative system(s) or procedures to be used in the performing of a mission or function, should a primary system be disrupted.

- Continuity of Operations Plan – A continuity of operations plan, as defined by DoD Directive 3020.26, "Continuity of Operations (COOP) Policy and Planning," May 26, 1995, are established by echelon II commands and above and are not required solely for Y2K operational issues. Where continuity of operations plans already exist and appropriately cover the Y2K operational issues, a Y2K appendix

can be made instead of developing an operational contingency plan. Operational contingency plans may be called continuity of operations plans.

The DoD Management Plan states that the system contingency plan and the operational contingency plan are highly interrelated. Although the two plans are based on the same intellectual methodology, a system contingency plan should relate directly to at least one operational contingency plan to ensure that in the event the system experiences a Y2K disruption, an alternative system or procedure is available. USSOCOM had developed or was developing its system contingency plans for its managed mission-critical systems. However, for those mission supporting systems that USSOCOM did not own, not all system contingency plans were obtained. As a result, operational contingency plans or continuity of operations plans were developed in the absence of many of the system contingency plans.

USSOCOM. USSOCOM and its Component commands had not fully acquired or developed contingency and continuity of operations plans for systems and missions that may be affected by Y2K problems. In February 1999, USSOCOM was tracking the contingency plans for only 30 mission-critical systems that it managed. USSOCOM reported 25 contingency plans completed. However, CCI contractor personnel responsible for tracking the contingency plans reported only 16 contingency plans completed. Additionally, the contingency plans for the mission-critical supporting systems had not been requested. A USSOCOM official stated that CCI contractor personnel should be requesting the contingency plans for all mission-critical systems. A CCI official, however, stated that the CCI personnel were responsible only for obtaining contingency plans for mission-critical systems managed by USSOCOM. The CCI official also stated that there was no requirement to obtain the contingency plans for mission-critical supporting systems. The official further stated that additional manpower would be required to support the mission-critical supporting systems.

On June 2, 1999, USSOCOM stated, ". . . of the twenty-five contingency plans on hand at the time of the visit [Inspector General, DoD visit], the Y2K staff had reviewed and approved sixteen. Nine plans needed further review or editing. At this time, all required plans are on hand and are under review by the components."

Additionally, USSOCOM stated that it had initiated efforts to collect contingency plans for its mission-critical supporting systems. USSOCOM stated,

> . . . of 320 such systems identified as of 26 May 1999, 29 do not process date data and we do not expect to obtain a Y2K specific contingency plan. Of the remaining 291 systems, we have collected approximately 60 contingency plans from the Services/Agencies. These efforts are hampered by a woefully inadequate methodology on the part of the Services and Agencies of making plans available to consumers.

USASOC. USASOC had not acquired all system contingency plans nor developed all continuity of operations plans for missions that may be affected by Y2K problems. USASOC reported nine USSOCOM managed system contingency plans on hand, and two USSOCOM managed system contingency plans not received. For the 50 mission supporting systems not owned by USSOCOM, USASOC reported having seven mission support system contingency plans on hand and 43 system contingency plans not on hand. (USASOC has used the terms operational contingency plans and continuity of operations plans interchangeably.) USASOC identified a requirement for 61 unit continuity of operations plans. As of March 31, 1999, USASOC had received 18 of the 61 unit continuity of operations plans and was working to obtain the remaining 43 plans.

NAVSPECWARCOM. NAVSPECWARCOM had not acquired all system contingency plans nor developed all continuity of operations plans for missions that may be affected by Y2K problems. As of March 31, 1999, NAVSPECWARCOM had developed six operational contingency plans.[4] The six contingency plans addressed 20 of NAVSPECWARCOM 24 mission-critical systems. NAVSPECWARCOM combined the system contingency planning requirements for mission-critical systems into an operational contingency plan. For example, the SEAL Delivery Vehicle[5] contingency plan included at least two mission-critical systems: control display unit and mission personal computer systems. A NAVSPECWARCOM official stated that premission planning covers the contingency planning requirement because the premission plans anticipated malfunctioning equipment. For example, as part of planning for a mission, NAVSPECWARCOM components are required to plan for contingencies such as loss of radio contact with base or other reporting element, loss of special equipment, failed resupply, and damage to water craft. NAVSPECWARCOM officials also stated that the command was not heavily dependent upon Y2K vulnerable technology. As a result, NAVSPECWARCOM had not made any official plans to test the Y2K contingency plans that had been developed.

AFSOC. AFSOC had not acquired all system contingency plans for missions that may be affected by Y2K problems. As of March 31, 1999, AFSOC had identified 113 mission-critical systems and obtained 20 system contingency plans. Although AFSOC had not received 100 percent of the system contingency plans, AFSOC Y2K officials stated that they had all of their continuity of operations plans without the use of system contingency plans. Additionally, AFSOC had identified the receipt of 36 functional contingency plans.

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[4] NAVSPECWARCOM operational contingency plans included mission-critical system contingency plan procedures Per the DoD Management Plan, mission-critical systems are required to have a system contingency plan and an operational contingency plan.

[5] A SEAL Delivery Vehicle is a manned, dry interior, battery-powered submersible craft.

Summary. Continuity of operations plans are important in identifying the necessary workarounds for systems that may fail because of Y2K problems. Documenting the three major types of contingency plans will assist in mitigating risks and will provide workarounds in the event of loss of resources because of Y2K problems. To ensure that Y2K problems will not cause undue impairment of the ability of the Component commands to support the USSOCOM mission, the Component commands need to develop and test Y2K operational or continuity of operation plans and functional contingency plans based on the workarounds identified in the system contingency plans.

Integration Testing, Operational Evaluations, and Chairman Contingency Assessment

Although each of the Component commands had engaged in integration testing of mission-critical systems, the level and adequacy of the Service testing program varied. USSOCOM had not developed a thorough operational evaluation to ensure that the headquarters and its Component commands could conduct its mission in a Y2K environment. USSOCOM and its Component commands did plan to participate in the Joint Staff's Chairman Contingency Assessment exercise to test USSOCOM contingency plans.

USASOC Integration Testing. USASOC had developed a Y2K integration testing program and had engaged in limited integration testing of mission-critical systems. In February 1999, USASOC had identified 39 thin-line systems to be integration tested before the operational evaluation. USASOC had completed limited integration testing that included five systems; however, various Y2K integration exercises for signal operations were still being scheduled. The Army had issued the Millennium Passage, which included integration testing for various mission-critical systems USASOC used. The USASOC Technology Application Program Office had done integration testing of the five helicopter types it used. The integration testing involved bench testing without any flight operations. Officials from the USASOC believed that there were no problems with the helicopters because they were mechanical and could be flown without any of the non-mechanical systems working. The testing did not involve any global positioning system satellite test, because officials stated that the global positioning system satellite was not needed to operate the helicopters. As of March 31, 1999, USASOC had completed flight Y2K compliance testing for all its airborne systems.

NAVSPECWARCOM Integration Testing. Although NAVSPECWARCOM was implementing the USSOCOM Y2K Management Plan, NAVSPECWARCOM had not developed an integration test plan for its mission-critical systems. The DoD Management Plan requires that the Components test all the interfaces to each of their systems to ensure compliance before bringing those systems into a commander in chief operational evaluation. Because of that requirement, NAVSPECWARCOM tasked Naval Special Warfare Group 2 and Special Boat Squadron Two to perform integration testing on their equipment.

The testing was done on the thin-line systems that included the patrol coastal boat, the SEAL Delivery Vehicle, the MARK V combat craft, and the communications van. The testing also incorporated additional tactical communications systems. NAVSPECWARCOM conducted the testing from January 5 through 8, 1999, and called the testing a mini-operational evaluation. The five dates tested were: September 9, 1999; December 31, 1999; February 28, 2000; February 29, 2000; and March 1, 2000. The systems clocks changed time ranged from 1 to 2 minutes per date, except one system, which was changed and run for 10 minutes and another system that was changed and run for 30 minutes. The test results identified that "all the times associated with dates were set at one (1) minute prior to the date indicated and rolled into the specific date." The test verified that the systems would continue to operate. However, the system was not used under normal conditions, information was not processed, and interfaces were not tested. NAVSPECWARCOM could not provide an integration test plan, which would identify all the test parameters and performance measures for the mini-operational evaluation, but still considered the evaluation test successful. NAVSPECWARCOM officials stated that contractors, vendors, manufacturers, and personnel from the Navy attended the mini-operational evaluation. However, the officials could not recall whether a USSOCOM official or a USSOCOM program manager had been present to oversee the testing. NAVSPECWARCOM officials stated that they had provided USSOCOM the mini-operational evaluation results in a January 15, 1999, report. On June 2, 1999, USSOCOM stated, ". . . NAVSPECWARCOM's mini-opeval [operational evaluation] does meet the requirements set forth in the DoD Management Plan Appendix and JS [Joint Staff] Opeval Plan."

AFSOC Integration Testing. AFSOC had developed a Y2K integration testing program. The Air Force systems program managers had certified that airframes used by AFSOC were Y2K compliant; however, AFSOC was not comfortable with the system program manager responses to AFSOC questions regarding the scope of testing. AFSOC concluded that the component testing and limited systems testing conducted by the systems program managers were not sufficient. As a result, in January 1999, AFSOC developed and completed a functional-centric and mission-centric integration test plan for all of its platforms to ensure a high degree of reliability on all its aircraft. The 18th Flight Test Squadron developed a Y2K test plan that was performed in combination with functional and mission integration testing. The 18th Flight Test Squadron maintained the expertise required for conducting such tests because its mission included testing and evaluating new or modified special operations aircraft and equipment. As of March 31, 1999, AFSOC completed ground testing and completed Y2K simulated flying exercises for each aircraft. AFSOC has concluded aircraft testing and expected to place the aircraft in a larger simulated operational environment to assess the aircraft total integrated warfighting capability. Although AFSOC had taken an aggressive approach to testing its aircraft and supporting systems in a Y2K environment, there were limitations. For example, an official of the 18th Flight Test Squadron stated that in-flight refueling operations would not be performed in the tests and identified it as a limitation. However, the official anticipated that the limitation would be evaluated during

the USSOCOM operational evaluations. Therefore, the functional and mission integration testing, coupled with the planned operational evaluations, if conducted on schedule, should provide AFSOC assurance that its aircraft will operate successfully in a Y2K environment. On April 27, 1999, USSOCOM stated, ". . . the decision to not perform air refueling during integration testing was not a limitation, but the result of a deliberate decision that the refueling mission was not essential. When coupled with the OP Eval [operational evaluation] even planning considerations and the refueling event lacking any subsystems with Y2K-related functions (VFR maneuver only), it was deemed unnecessary by senior leadership."

Operational Evaluations. USSOCOM and its Component commands had developed an extensive Y2K operational evaluation strategy. The Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (Public Law 105-261) directed the Secretary of Defense to submit:

> . . a plan for the execution of a simulated year 2000 as part of military exercises . . . in order to evaluate, in an operational environment, the extent to which information technology and national security systems involved in those exercises will successfully operate during the actual year 2000, including the ability of those systems to access and transmit information from point of origin to point of termination

Public Law 105-261 also directed that at least 25 of those exercises ". . . are conducted so as to include a simulated year 2000 [and] at least two of those exercises are conducted by the commander of each unified or specified combatant command." Public Law 105-261 also states, ". . . all mission critical systems that are expected to be used if the Armed Forces are involved in a conflict in a major theater of war are tested in at least two exercises." Initially, USSOCOM was assigned to conduct its operational evaluation in conjunction with the Commander in Chief, U.S. Pacific Command and the Commander in Chief, U.S. Atlantic Command operational evaluations. In January 1999, the Commander in Chief, USSOCOM canceled the USSOCOM involvement in the two commanders in chief operational evaluations because no "sensor to shooter" testing was scheduled and the test would not meet the requirements of the USSOCOM nine missions. USSOCOM redirected its Y2K efforts to initially focus on a series of operational evaluations to assess the Joint Special Operations Command thin-line systems. USSOCOM used a "crawl, walk, run" approach. The first three operational evaluations addressed segments of its nine missions. The fourth operational evaluation was to conduct the full mission.

In addition to the Joint Special Operations Command focused operational evaluations, a fifth operational evaluation will focus on USSOCOM Component commands' thin-line systems. Based on the USSOCOM operational evaluation requirement, its 30 managed mission-critical systems would need to be tested in two operational evaluations. USSOCOM had identified 20 of the 30 systems on its thin line of systems. The remaining 10 mission-critical systems would be tested as part of the Y2K certification process. Because of financial limitations,

the Joint Staff mandated that only systems included on thin lines be tested in an operational environment. However, as the sole manager of the 10 remaining mission-critical systems, USSOCOM still had a requirement to ensure those 10 mission-critical systems were tested twice. At least one test had to be a commanders in chief operational evaluation. The second test could be a commanders in chief operational evaluation, a Service integration test, or a functional end-to-end test. Based on the USSOCOM operational evaluations, USASOC and AFSOC thin-line systems would meet Public Law 105-261 requirement of testing in two unified or specified command exercises. However, NAVSPECWARCOM would not meet the two-exercise requirement. As a result, USSOCOM and NAVSPECWARCOM were counting the mini-operational evaluation conducted under the integration testing of mission-critical systems as equivalent to a USSOCOM operational evaluation.

USSOCOM Operational Evaluation Additional Funding. USSOCOM, USASOC and NAVSPECWARCOM were in the process of determining the number of regular exercises to be canceled to assist in funding the Y2K operational evaluations. AFSOC had identified three exercises that could be canceled per USSOCOM tasking, which will assist in offsetting the projected costs of the USSOCOM operational evaluations. AFSOC was concerned, however, that if the level of effort were increased for the operational evaluations, the projected costs would also increase significantly.

Chairman Contingency Assessment. USSOCOM and its Component commands had a minimal role in the Joint Staff's Chairman Contingency Assessment, referred to as the "Positive Response Exercise." The Positive Response Exercise was designed to evaluate the national capability to accomplish strategic national tasks, given failure of normally dependable mission-critical systems. The exercise was broken into four phases.

- Mobilization
- Strategic Deployment and Redeployment
- Strategic Intelligence, Surveillance, and Reconnaissance
- Sustainment

The Positive Response Y2K-1 (mobilization) exercise focused on the ability of the Reserves and National Guard to mobilize. The exercise was at Fort Stewart, Georgia, February 4 through 8, 1999. As planned, five systems were deemed to be inoperable and the associated continuity of operations plans were exercised. Several installations had roles in this exercise, including USASOC. The role of USASOC was to establish a limited response cell at Fort Bragg, North Carolina. Each installation was sent master scenario event lists that it would need to perform. The Army, the Joint Staff, and the Army Audit Agency would then do an assessment of contingency plans and any internal and external

workarounds. USASOC had a small role in the exercise because the USASOC Reserve and National Guard forces were limited. Neither NAVSPECWARCOM nor AFSOC had a role in the mobilization exercise.

Theater SOC Oversight, Guidance Operational Evaluation. Although USSOCOM was established to manage all special operations forces, the theater SOCs were not required to report their Y2K status to USSOCOM. A USSOCOM official stated that the oversight of the theater SOCs was the responsibility of the attached geographical unified commands and should be included in the respective unified command's Y2K program. As of February 4, 1999, USSOCOM had not received any Y2K reporting status from the theater SOCs. A USSOCOM official stated, however, that the USSOCOM was concerned with the Y2K compliance of USSOCOM managed mission-critical systems in use at the theater SOCs.

USSOCOM was unaware of the involvement of theater SOCs in Y2K operational evaluations. USSOCOM assumed that the theater SOCs and their respective forces would participate in the unified commands' Y2K operational evaluations. However, the theater SOC participation with the unified commands' Y2K operational evaluations varied from no involvement in the commander in chief operational evaluation to setting up a joint special operations task force headquarters. For example, U.S. Central Command officials stated that the SOC, U.S. Central Command should conduct its Y2K operational evaluation under USSOCOM. As a result, U.S. Central Command's operational evaluation did not involve the theater SOC and its forces. In the U.S. European Command, the theater SOC had limited involvement in the U.S. European Command's operational evaluation. The operational evaluation exercised the process from headquarters U.S. European Command to a Service Joint Task Force. In the Service Joint Task Force, the SOC role was to establish two work stations that included a secure telephone unit III (STU-III) and computer. The SOC did not report any Y2K failures. The U.S. Pacific Command theater SOC established a joint special operations task force headquarters; however, the theater SOC units located in the Pacific had not been tasked to conduct any Y2K oriented operations.

Conclusion

USSOCOM and its Component commands had made significant progress in addressing the Y2K problem. However, additional work must be done. USSOCOM must ensure that the USSOCOM managed and Service managed systems are properly reported in accordance with the DoD Management Plan. Because USSOCOM had not assertively monitored the implementation of the USSOCOM Y2K Management Plan within its headquarters and the Component commands, inaccuracy in the Y2K reporting had occurred and affected USSOCOM assessment of Y2K compliancy. Additionally, inaccurate systems reporting had affected USSOCOM Component commands' integration testing before participating in USSOCOM operational evaluations. This could result in

mission-critical systems not being properly certified for USSOCOM Y2K operational evaluations. USSOCOM and the Component commands must develop contingency plans and continuity of operations plans to ensure that there are no disruptions in the commands' abilities to successfully execute their missions. USSOCOM and the Component commands must also ensure that all mission-critical systems are tested twice in an operational evaluation or equivalent exercise.

Recommendations, Management Comments, and Audit Response

Deleted and Renumbered Recommendations. As a result of management comments, we deleted draft Recommendation 4.d. Draft Recommendation 4.e. has been renumbered as Recommendation 4.d.

1. We recommend that the Commander in Chief, U.S. Special Operations Command:

a. Continue to monitor its mission-critical systems to ensure they are reported correctly.

U.S. Special Operations Command Comments. USSOCOM concurred.

Audit Response. We consider USSOCOM comments responsive. Although USSOCOM provided no details, because of the ongoing nature of this audit project, we are fully aware of the USSOCOM efforts to monitor its mission-critical systems and update their reporting status. No further response is required.

b. Reexamine the reporting of; ensure accuracy and compliance of; and adequately report all U.S. Special Operations Command systems and supporting systems required to accomplish its mission in accordance with the DoD Year 2000 Management Plan.

U.S. Special Operations Command Comments. USSOCOM concurred, stating that they are accurately reporting all systems and supporting systems required to accomplish its missions.

Audit Response. We consider USSOCOM comments responsive. As a followup issue in our continuing audit project, we will validate the accuracy and compliance of the USSOCOM systems and supporting systems reporting. No further response is required.

c. Validate the consistency, compliancy and reporting criteria between U.S. Special Operations Command, U.S. Army Special Operations Command, and the U.S. Army.

U.S. Special Operations Command Comments. USSOCOM concurred, stating they have reviewed the reporting procedures to ensure accurate reporting.

d. Identify and provide input to the Commander in Chief Thin Line System List report the documented status of U.S. Special Operations Command and its Components' thin-line systems.

U.S. Special Operations Command Comments. USSOCOM concurred.

Audit Response. We consider USSOCOM comments responsive. Although USSOCOM provided no details, because of the ongoing nature of this audit project, we are fully aware of the USSOCOM efforts to identify and provide input to the Commander in Chief Thin Line System List of the documented status of USSOCOM and its Components' thin-line systems. During the USSOCOM Operational Evaluation V, from August 9 through 11, 1999, USSOCOM and Joint Staff representatives worked together to identify the differences in the Commander in Chief Thin Line System List. The USSOCOM and Joint Staff representatives eventually agreed that the USSOCOM thin-line systems should be reported as 42 USSOCOM managed systems and 91 supporting systems. We continue to work with USSOCOM to ensure that all required thin-line systems are properly identified, especially in the Operational Evaluation Thin Line, to ensure that they receive the necessary testing. No further response is required.

e. Reconcile the difference between the Command Control and Information contractor and U.S. Special Operations Command reporting of the year 2000 status of mission-critical systems.

U.S. Special Operations Command Comments. USSOCOM nonconcurred, stating that the inconsistencies cited by the Inspector General, DoD, are a misperception. USSOCOM stated that in October 1998, it initiated a very stringent policy of collecting Y2K compliance documentation in a central repository. The CCI document in question was a tally of the Y2K "due diligence" documents that had been collected in the central repository under the new policy. USSOCOM stated that the CCI internal ledger should not be confused with the actual phase of renovation reported to the Joint Staff. Further, USSOCOM stated that it has only one database and one reporting vehicle to the Joint Staff.

Audit Response. Although USSOCOM nonconcurred, we consider the comments partially responsive. The USSOCOM Y2K Management Plan established the procedures for the USSOCOM Y2K program. The plan identifies five phases that each USSOCOM managed system must complete, supporting documentation required, and approvals required before moving to the next phase. To track this process, USSOCOM developed the Due Diligence books for each of the USSOCOM managed systems. The contract between USSOCOM and CCI provides that CCI will be responsible for the Due Diligence books and establishing the monthly Joint Staff status report. On

August 10, 1999, we reviewed the Due Diligence books for 18 USSOCOM managed mission-critical systems. Although some of the Due Diligence books still lacked complete documentation, the overall condition of those 18 Due Diligence books was adequate. The Due Diligence books for the remaining 12 USSOCOM managed mission-critical systems will be reviewed as part of our continuing audit project. We continue to work with USSOCOM in identifying documentation and approval shortfalls, and request USSOCOM reconsider its position and provide additional comments in response to this final report.

f. Continue to identify interfaces for the mission-critical systems.

U.S. Special Operations Command Comments. USSOCOM concurred, stating that all interfaces have been identified since the information cutoff date on this report.

g. Identify and track that all mission-critical interfaces are tested during operational evaluations.

U.S. Special Operations Command Comments. USSOCOM concurred, stating that it has completed four operational evaluations and has adequate procedures in place to track interfaces tested during the operational evaluations.

h. Develop and obtain contingency plans for the identified mission-critical systems for U.S. Special Operations Command to include U.S. Special Operations Command managed systems and supporting systems from the subordinate commands.

U.S. Special Operations Command Comments. USSOCOM concurred, stating that it has system contingency plans for USSOCOM managed systems. USSOCOM also stated that it will continue to coordinate with the Services, agencies, and organizations to obtain all required supporting systems plans.

i. Develop continuity of operations plans for all missions.

U.S. Special Operations Command Comments. USSOCOM concurred, stating that it has developed, and continues to refine, continuity of operations plans.

j. Ensure that the 10 U.S. Special Operations Command managed mission-critical systems not included in the operational evaluations meet the DoD Year 2000 Management Plan, Appendix I, and the Joint Chiefs of Staff Year 2000 Operational Evaluation Plan requirements.

U.S. Special Operations Command Comments. USSOCOM concurred.

Audit Response. We consider the USSOCOM comments partially responsive. Although USSOCOM concurred with the recommendation, no details were provided on how the 10 USSOCOM managed mission-critical systems not included in the operational evaluations will be evaluated in order to meet the

DoD Management Plan requirements. We continue to work with USSOCOM to ensure that all required mission-critical systems are properly evaluated, and request USSOCOM provide additional comments in response to this final report.

k. Reevaluate whether the Naval Special Warfare Command mini-operational evaluation meets criteria in the DoD Year 2000 Management Plan, Appendix I, and the Joint Chiefs of Staff Year 2000 Operational Evaluation Plan.

U.S. Special Operations Command Comments. USSOCOM concurred, stating that although USSOCOM and NAVSPECWARCOM feel that the mini-operational evaluation conducted by NAVSPECWARCOM meets the specified criteria, they are reassessing the evaluation process.

l. Expedite planning of operational evaluations and provide planning information to Component commands to facilitate resolution of planning and funding problems at the Service level.

U.S. Special Operations Command Comments. USSOCOM nonconcurred, stating that as of June 18, 1999, USSOCOM had already concluded three successful operational evaluations and was executing its fourth. Additionally, planning for a fifth operational evaluation, scheduled for August 1-11, 1999, was nearly complete. Further, USSOCOM stated that all its Components are funded based on their Y2K assessments and that all planning issues have been adequately resolved.

Audit Response. Although USSOCOM nonconcurred, actions taken by USSOCOM and its Component commands in conducting four operational evaluations and planning a fifth operational evaluation satisfy the intent of the recommendation. No further comments are required.

2. We recommend that the Director, Joint Staff require the Special Operations Commands attached to the geographical unified commands to report monthly their year 2000 status planned and actual operational evaluation results.

Joint Staff Comments. The Joint Staff neither concurred nor nonconcurred, stating that the Joint Staff Operational Evaluation Program encompasses the nine missions associated with special operations. On behalf of all theater special operations commands, USSOCOM will evaluate those missions during its five scheduled operational evaluations. USSOCOM will then report the results to the Joint Staff, informing them of the Y2K status of the special operations commands.

Audit Response. We consider the Joint Staff comments nonresponsive. USSOCOM only has administrative oversight over the theater SOCs and not operational control. Based upon our work at USSOCOM, as well as at U.S. Atlantic Command, U.S. Central Command, and U.S. European Command, the efforts of the theater SOCs remain uncaptured. For example,

USSOCOM has incorporated elements of SOC, Atlantic Command in the fifth operational evaluation. During the planning of the operational evaluation, it was observed that SOC, Atlantic Command officials had not been provided the lessons learned from the previous four operational evaluations. USSOCOM personnel recognized it as an oversight on their part. SOC, Atlantic Command officials also were not familiar with USSOCOM mission-critical and thin-line systems, and contingency planning requirements, and were also unclear on important aspects of the operational evaluation process. Because of the minimal communication found to date between USSOCOM and the theater SOCs regarding Y2K efforts, we feel that allowing USSOCOM to speak on their behalf regarding Y2K issues would be a serious disservice to the theater SOCs and their associated unified commands. We request that the Joint Staff reconsider its position and provide additional comments in response to this final report.

3. We recommend that the Deputy Commanding General, U.S. Army Special Operations Command:

a. Continue to monitor the non-year 2000 compliant mission-critical systems.

Management Comments. Responding for USASOC, USSOCOM concurred, stating that USASOC will continue to monitor all non-Y2K compliant systems through the last designated critical date of February 29, 2000.

b. Continue to obtain all contingency plans for the systems that are mission critical.

Management Comments. Responding for USASOC, USSOCOM concurred, stating that USASOC has aggressively pursued system contingency plans for all its thin-line systems from the respective program managers. Furthermore, to expedite the gathering of these plans, the USASOC Deputy Commanding General signed a memorandum requesting that the program managers submit system contingency plans and provide technical support at the command's integration and operational evaluations. All program managers have responded excellently, and some are even revising their contingency plans to make them more suitable for operator-level action. The estimated completion date of this effort was July 25, 1999.

c. Continue to obtain unit continuity of operations plans for missions that may be affected by year 2000 problems.

Management Comments. Responding for USASOC, USSOCOM concurred, stating that USASOC obtained 96 percent of all subordinate unit continuity of operations plans. USASOC is also obtaining continuity plans that address both the warfighting tasks of its major subordinate commands and units, as well as continuity plans for its headquarters staff directorates' garrison operations. The target completion date of this effort is September 30, 1999.

d. Ensure that the 39 thin-line systems are tested in U.S. Army Special Operations Command exercises before they are entered into the U.S. Special Operations Command operational evaluations.

Management Comments. Responding for USASOC, USSOCOM concurred, stating that USASOC successfully completed its functional integration testing employing all thin-line systems, except for aircraft, in a tactical environment. USASOC integration testing, "Operation Millennium Lightning/Operational Evaluation 5A," was conducted from June 16 through 25, 1999. In addition, all 160th Special Operations Aviation Regiment aircraft were tested in integration testing from March 1 through 9, 1999.

4. We recommend that the Commander, Naval Special Warfare Command:

a. Continue to monitor the mission-critical systems that are not year 2000 compliant.

b. Ensure that all Naval Special Warfare Command mission-critical and thin-line systems are identified, reported, and tracked by U.S. Special Operations Command.

c. Develop or obtain operational contingency plans for all mission-critical systems.

d. Reevaluate the Naval Special Warfare Command mini-operational evaluation against the DoD Year 2000 Management Plan, Appendix I, requirements.

Management Comments. Responding for NAVSPECWARCOM, USSOCOM concurred, stating that all NAVSPECWARCOM mission-critical systems have been identified and reported; that all contingency plans for USSOCOM managed systems have been obtained and it continues to obtain contingency plans for other mission-critical systems; and that although both USSOCOM and NAVSPECWARCOM feel that the NAVSPECWARCOM mini-operational evaluation meets the specific criteria, they are reassessing the evaluation process.

5. We recommend that the Commander, Air Force Special Operations Command:

a. Continue to monitor the mission-critical systems that are not year 2000 compliant.

b. Continue to obtain contingency plans for all mission-critical systems.

c. Continue functional end-to-end testing of Air Force Special Operations Command aircraft and apply lessons learned in planning for Service-level integration tests.

Management Comments. Responding for AFSOC, USSOCOM concurred with Recommendations 5.a. and 5.b., stating that AFSOC has all contingency plans for USSOCOM managed systems and continues to obtain contingency plans for other mission-critical systems. USSOCOM nonconcurred with Recommendation 5.c., stating that AFSOC had concluded comprehensive functional end-to-end tests of all AFSOC and USASOC aircraft as of March 12, 1999. USSOCOM also states that AFSOC participated in numerous Air Force and DoD technical exchanges and conferences to share the valuable lessons learned during those tests.

Audit Response. Although USSOCOM nonconcurred with Recommendation 5.c., actions taken by AFSOC to conduct functional end-to-end testing satisfies the intent of the recommendation. No further comments are required.

Appendix A. Audit Process

This is one in a series of reports being issued by the Inspector General, DoD, in accordance with an informal partnership with the Chief Information Officer, DoD, to monitor DoD efforts to address the Y2K computing challenge. For a listing of audit projects addressing the issue, see the Y2K web pages on the IGnet at http://www/ignet.gov.

Scope

We reviewed and evaluated the ability of USSOCOM and its Component commands to resolve Y2K issues to avoid undue disruption of its mission. We also reviewed issues related to funding and staffing as applied to Y2K concerns. We reviewed the President's Executive Order, "Year 2000 Conversion," February 4, 1998, and the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 (Public Law 105-261), October 17, 1998. We reviewed and evaluated DoD, Service, and Joint Staff directives, policies, and procedures related to Y2K activities dated March 1998 through March 1999. For this report we visited USSOCOM, USASOC, NAVSPECWARCOM, and AFSOC.

DoD-Wide Corporate-Level Goals. In response to the Government Performance and Results Act, DoD has established 6 DoD-wide corporate-level performance objectives and 14 goals for meeting the objectives. This report pertains to achievement of the following objective and goal.

> **Objective:** Prepare now for an uncertain future. **Goal:** Pursue a focused modernization effort that maintains U.S. qualitative superiority in key war fighting capabilities. **(DoD-3)**

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following objectives and goals in the Information Management Functional Area.

- **Objective:** Become a mission partner. **Goal:** Serve mission information users as customers. **(ITM-1.2)**
- **Objective:** Provide services that satisfy customer information needs. **Goal:** Modernize and integrate Defense information infrastructure. **(ITM-2.2)**
- **Objective:** Provide services that satisfy customer information needs. **Goal:** Upgrade technology base. **(ITM-2.3)**

High-Risk Area. In its identification of risk areas, the General Accounting Office has specifically designated risk in resolution of the Y2K problem as high. This report provides coverage of that problem and of the overall Information Management and Technology high-risk area.

Methodology

We focused our review of USSOCOM on the Y2K efforts of the unified command headquarters and its subordinate Component commands. We reviewed the progress employed by USSOCOM and its Component commands to identify and report mission-critical systems, develop system contingency plans, and develop continuity of operations plans. To determine the status of the Component commands, we reviewed their respective criteria and process to identify and report Y2K compliance activities. We interviewed the leadership and members of Y2K entities established at USSOCOM and its Component commands. We also interviewed members of the unified commands and its Component commands staff to determine the respective command level of involvement in addressing Y2K problems; to assess the Y2K impact on joint force architecture; to identify any mission-critical system not previously considered; and to determine the funding and staffing. We reviewed the impact and influence of supporting commands on USSOCOM Y2K compliance and testing. We did not use computer-processed data to perform this audit.

Audit Type, Dates, and Standards. We performed this program audit from January through May 1999 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available upon request.

Management Control Program. We did not review the management control program related to the overall audit objective because DoD recognized the Y2K issue as a material management control weakness area in the FY 1998 Annual Statement of Assurance.

Appendix B. Summary of Prior Coverage

The General Accounting Office and the Inspector General, DoD, have conducted multiple reviews related to Y2K issues. General Accounting Office reports can be accessed over the Internet at http://www.gao.gov. Inspector General, DoD, reports can be accessed over the Internet at http://www.dodig.osd.mil. The following Y2K reports have been issued on summary Y2K issues or on other unified commands.

Inspector General, DoD

Report No. 99-232, "Year 2000 Issues Within U.S. Atlantic Command and the Service Components," August 16, 1999.

Report No. 99-145, "Year 2000 Issues Within U.S. European Command and Its Service Components," April 30, 1999.

Report No. 99-141, "Year 2000 Issues Within U.S. Central Command and Its Service Components," April 22, 1999.

Report No. 99-125, "Year 2000 Issues Within the U.S. Pacific Command's Area of Responsibility-U.S. Forces Korea," April 7, 1999.

Report No. 99-122, "Year 2000 Readiness Reporting," April 2, 1999.

Report No. 99-059, "Summary of DoD Year 2000 Conversion Issues - Audit and Inspection Results," December 24, 1998.

Report No. 98-129, "U.S. Special Operations Command Year 2000 Issues," May 8, 1998.

Army Audit Agency

Memorandum Report No. AA 98-291, "U.S. Southern Command Year 2000 Issues," July 31, 1998.

Memorandum Report No. AA 98-292, "U.S. European Command Year 2000 Issues," July 30, 1998.

Air Force Audit Agency

Project No. 98066033, "U.S. Strategic Command Year 2000 Issues," September 29, 1998.

Project No. 98066032, "U.S. Transportation Command Year 2000 Issues," September 25, 1998.

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
  Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
  Deputy Comptroller (Program/Budget)
Under Secretary of Defense for Personnel and Readiness
Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
  Deputy Chief Information Officer and Deputy Assistant Secretary of Defense (Chief Information Officer Policy and Implementation)
    Principal Director for Year 2000

Joint Staff

Director, Joint Staff

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Commanding General, U.S. Army Special Operations Command
Chief, National Guard Bureau
  Inspector General, National Guard Bureau
Auditor General, Department of the Army
Chief Information Officer, Army
Inspector General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Commanding Admiral, Naval Special Warfare Command
Auditor General, Department of the Navy
Chief Information Officer, Navy
Inspector General, Department of the Navy

Marine Corps

Commandant of the Marine Corps
Inspector General, Marine Corps

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Commanding General, U.S. Air Force Special Operations Command
Auditor General, Department of the Air Force
Chief Information Officer, Air Force
Inspector General, Department of the Air Force

Unified Commands

Commander in Chief, U.S. European Command
Commander in Chief, U.S. Pacific Command
Commander in Chief, U.S. Atlantic Command
Commander in Chief, U.S. Southern Command
Commander in Chief, U.S. Central Command
Commander in Chief, U.S. Space Command
Commander in Chief, U.S. Special Operations Command
Commander in Chief, U.S. Transportation Command
Commander in Chief, U.S. Strategic Command

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Information Systems Agency
  Inspector General, Defense Information Systems Agency
  Chief Information Officer, Defense Information Systems Agency
  United Kingdom Liaison Officer, Defense Information Systems Agency
Director, Defense Logistics Agency
Director, National Security Agency
  Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency
Inspector General, National Imagery and Mapping Agency
Inspector General, National Reconnaissance Office

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
  Office of Information and Regulatory Affairs
General Accounting Office
  National Security and International Affairs Division
    Technical Information Center
  Director, Accounting and Information Management Division, Defense Information and Financial Management Systems, General Accounting Office

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
Senate Special Committee on the Year 2000 Technology Problem
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Management, Information, and Technology, Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International Relations, Committee on Government Reform
House Subcommittee on Technology, Committee on Science

U.S. Special Operations Command Comments

UNITED STATES SPECIAL OPERATIONS COMMAND
OFFICE OF THE DEPUTY COMMANDER IN CHIEF
7701 TAMPA POINT BLVD
MACDILL AIR FORCE BASE, FLORIDA 33621-5323

MEMORANDUM THRU: DIRECTOR, JOINT STAFF, PENTAGON, WASHINGTON, DC 20318

FOR: INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, 400 ARMY NAVY DRIVE, ARLINGTON, VIRGINIA 22202

SUBJECT: Draft of a Proposed Audit Report, Year 2000 Issues Within U.S. Special Operations Command (USSOCOM) and Its Component Commands, Dated 18 June 1999 (Project Number 9LA-5033)

1. United States Special Operations Command (USSOCOM) recognizes the importance of the Year 2000 (Y2K) problem. We also understand the impact the potential failure of our information technology (IT) systems can have on special operations forces (SOF) Our goal is to unequivocally ensure that our mission-critical systems will successfully operate in the year 2000 and beyond. To that end, representatives at all levels of USSOCOM have reviewed and addressed the issues identified in the subject report.

2 USSOCOM's Y2K Task Force Director submitted informal comments from the HQs staff and from the component commands to earlier drafts of this audit report provided in April and May 1999. Our comments to the current draft, dated 18 June 1999 are encapsulated in paragraph 3 below.

3 USSOCOM has implemented the following actions in response to the subject audit recommendations:

Recommendations for the Commander in Chief (CINC), U.S. Special Operations Command:

a. Continue to monitor its mission-critical systems to ensure they are reported correctly.

Comment: Concur

b. Reexamine the reporting; ensure accuracy and compliance of; and adequately report all USSOCOM systems and supporting systems required to accomplish its mission in accordance with the DoD Year 2000 Management Plan

Comment: Concur. USSOCOM is accurately reporting all systems and supporting systems required to accomplish its missions.

c. Validate the consistency, compliancy, and reporting criteria between USSOCOM, U.S. Army Special Operations Command (USASOC), and the U.S Army.

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Comment: Concur. USSOCOM has reviewed these reporting procedures to ensure accurate reporting.

d. Identify and provide input to the CINC Thin Line System to report the documented status of USSOCOM and its component thin line systems.

Comment: Concur

e. Reconcile the difference between the Command Control and Information (CCI) contractor and USSOCOM reporting of mission-critical systems year 2000 compliance phases completed.

Comment: Non-Concur. The inconsistencies cited by the DoD IG are a misperception. In October 1998, USSOCOM initiated a very stringent policy of collecting Y2K compliance documentation in a central repository. This change necessitated the collection of documents covering phases of Y2K renovation that had already been accomplished by program managers, approved by the USSOCOM Steering Group, and reported to the Joint Staff. The CCI document in question was a tally of the Y2K "due diligence" documents that had been collected in the central repository under the new policy. This CCI internal ledger should not be confused with the actual phase of renovation reported to the Joint Staff. USSOCOM has one database and one reporting vehicle to the Joint Staff. These are consistent with one another. Therefore, it is requested you delete Table 2 from page 13. The table adds to the misperception that CCI and USSOCOM are working from separate databases and reporting data differently. CCI works for USSOCOM, and there is only ONE official USSOCOM voice. USSOCOM provides accurate information from one consolidated database.

f. Continue to identify interfaces for the mission-critical systems.

Comment: Concur All interfaces have been identified since the audit.

g Identify and track that all interfaces are tested during operational evaluations.

Comment: Concur. USSOCOM has concluded four successful operational evaluations and has adequate procedures in place to track interfaces tested during the operational evaluations.

h Develop and obtain contingency plans for the identified mission-critical systems for USSOCOM to include USSOCOM-managed systems and supporting systems from the subordinate commands.

Comment: Concur. We have system contingency plans for USSOCOM-managed systems for which we are the executive agent. We have requested system contingency plans for non-USSOCOM managed systems that are in our thin-line. We will continue to coordinate with all applicable Services, agencies and organizations to obtain all required plans.

i. Develop continuity of operation plans for all missions.

Comment: Concur USSOCOM has developed, and continues to refine, continuity of operation plans.

j. Ensure the 10 USSOCOM-managed mission-critical systems not included in the operational evaluations meet the DoD Year 2000 Management Plan, Appendix I, and the Joint Chief of Staff Year 2000 Operational Evaluation Plan requirements.

Comment: Concur.

k. Reevaluate whether the Naval Special Warfare Command (NAVSPECWARCOM) mini-operational evaluation meets criteria in the DoD Year 2000 Management Plan, Appendix I, and the Joint Chiefs of Staff Year 2000 Operational Evaluation Plan.

Comment: Concur. Although USSOCOM and NAVSPECWARCOM feel the mini-operational evaluation conducted by NAVSPECWARCOM meets the specified criteria, USSOCOM and NAVSPECWARCOM are reassessing the evaluation process. USSOCOM has not found Appendix I to be available in any version of the DoD Year 2000 Management Plan.

l. Expedite planning of operational evaluations and provide planning information to component commands to facilitate resolution of planning and funding problems at the Service level.

Comment: Non-concur. As of 18 June 1999, USSOCOM had already concluded three successful operational evaluations and was executing its fourth. Planning for a fifth operational evaluation is nearly complete with execution planned for 1-11 August 1999. All USSOCOM components are funded based on their Y2K assessments. All planning issues have been adequately resolved

Recommendations for the Commanding General, USASOC:

a. Continue to monitor the non-year 2000 compliant mission-critical systems

Comment: Concur. USASOC will continue to monitor all non-year 2000 compliant systems through the last designated critical date of 29 February 2000.

b. Continue to obtain all contingency plans for the systems that are mission-critical.

Comment: Concur. USASOC has aggressively pursued obtaining systems contingency plans for all its thin-line systems from the respective program mangers (PM). To expedite the gathering of these plans, the USASOC Deputy Commanding General signed a memorandum requesting the PMs to submit system contingency plans and to provide technical support at the

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command's integration and operational evaluations. The response has been excellent; all PMs have responded. Some PMs were requested to revise their contingency plans in order to make them more suitable for operator level action. The estimated completion date is 25 July 1999.

c. Continue to obtain continuity of operations plans for missions that may be affected by year 2000 problems.

Comment: Concur. USASOC has obtained 96% of all subordinate unit continuity of operations plans. USASOC is fully meeting the intent of this recommendation by obtaining continuity plans that address both the warfighting tasks of its Major Subordinate Commands/Units as well as continuity plans for its headquarters staff directorates' garrison operations. The target completion date for continuity of operations plans is 30 September 1999.

d. Ensure that the 39 thin-line systems are tested in a USASOC exercise before they are entered into the USSOCOM operational evaluations.

Comment: Concur USASOC conducted and successfully completed its functional integration testing employing all thin-line systems, except for aircraft, in a tactical environment. The testing, Operation Millennium Lightning/Operational Evaluation 5A, was conducted at Ft Bragg, NC from 16-25 June 1999. All 160th Special Operations Aviation Regiment aircraft were tested in integration testing at Hurlbert Field, FL from 1-9 March 1999. The DoD IG inspector was present during all testing and stated USASOC met all guidance for the conduct of service component functional integration testing.

Recommendations for the Commander, Navy Special Warfare Command (NAVSPECWARCOM).

a. Continue to monitor the mission-critical systems that are not year 2000 compliant.

Comment: Concur.

b. Ensure that all NSWC mission-critical and thin line systems are identified, reported, and tracked by USSOCOM.

Comment: Concur. All NSWC mission-critical and thin line systems have been reported to USSOCOM and the Joint Staff and are being tracked by USSOCOM.

c. Develop or obtain operational contingency plans for all mission-critical systems.

Comment: Concur. NSWC has all contingency plans for USSOCOM-managed systems and continues to obtain contingency plans for other mission-critical systems.

Deleted

d. Reevaluate the adequacy of the integration testing completed on its thin-line systems.

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Comment: Non-Concur. This finding appears to be a duplicate of the finding in paragraph e below. This recommendation should be deleted.

e. Reevaluate the NSWC mini-operational evaluations against the DoD Year 2000 Management Plan, Appendix I, requirements.

Comment: Concur. Although USSOCOM and NSWC feel the mini-operational evaluation conducted by NSWC meets the specified criteria, USSOCOM and NSWC are reassessing the evaluation process.

Recommendations for the Commander, Air Force Special Operations Command (AFSOC):

a. Continue to monitor the mission-critical systems that are not Year 2000 compliant

Comment: Concur

b. Continue to obtain contingency plans for all mission-critical systems.

Comment: Concur. AFSOC has all contingency plans for USSOCOM-managed systems and continues to obtain contingency plans for other mission-critical systems

c. Continue functional end-to-end testing of AFSOC aircraft and apply lessons learned in planning for Service-level integration tests.

Comment: Non-Concur. AFSOC has concluded a comprehensive functional end-to-end test of all AFSOC and USASOC aircraft as of 12 March 1999. Further, AFSOC has participated in numerous Air Force and DoD technical exchanges and conferences to share the valuable lessons learned during those tests.

4 The following comments address statements in the narrative portion of your draft audit report.

a. Page i, Executive Summary, paragraph heading "Results": Your statements in this paragraph are inaccurate. Your report states "U.S. Special Operations Command had not developed an adequate control process for its Y2K program." Our program is squarely on-track, and we request you define those control processes deemed inadequate. With regard to the statement "U.S. Special Operations Command and its Component commands must intensify their efforts," USSOCOM's Y2K program enjoys the CINC's highest priority for FY99 funding and support. All program managers and component Y2K representatives are working hard to ensure their respective systems are compliant and ready for operational evaluation. USSOCOM has successfully concluded four operational evaluations with a fifth operational evaluation scheduled for 1-11 August 1999 Finally, we disagree with your comments on the inadequacy of the reporting provided by the component commands. The components regularly report their Y2K

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progress to HQ USSOCOM via formal message, monthly O-6 level video teleconferences, Y2K Steering Group meetings, and conferences.

b. Page i, Executive Summary, paragraph heading "Summary of Recommendations": This paragraph should be revised in accordance with the comments made to the recommendations above

Revised

c. Page 6, USSOCOM and Its Component Commands Management of Y2K Efforts, paragraph heading "USSOCOM Contract Support for Y2K": USSOCOM's second contract is with Keane Federal Systems, Inc. vice Keane Industries.

d. Page 7, USSOCOM and Its Component Commands Management of Y2K Efforts, paragraph heading "USASOC Program": Your report states the Task Force was restructured in March 1999 The Task Force was actually restructured in January 1999

e. Page 8, USSOCOM and Its Component Commands Management of Y2K Efforts, paragraph heading "NAVSPECWARCOM Program": We disagree with the comments you make in this paragraph NAVSPECWARCOM does have a formal program. They have had a formal working group and contractor support since October 1998. While NAVSPECWARCOM did not publish their own Y2K plan or strategy, NAVSPECWARCOM is using the USSOCOM Y2K Management Plan as their own. USSOCOM approved this course of action.

f. Page 8, USSOCOM and Its Component Commands Management of Y2K Efforts, paragraph heading "AFSOC Program": We agree with your comments, however, we would like to clarify that AFSOC was using the JCS Operational Guide, AF Assessment Master Plan, and USSOCOM Y2K Management Plan as tiered guidance. AFSOC personnel defined specific actions and strategies within the construct of the Command's Y2K steering group guidance.

g. Page 9, USSOCOM and its Component Command Mission-Critical Systems Identification and Thin Lining, paragraph heading "USSOCOM Critical Missions and Functions Thin-line Approach": The definitions attributed to USSOCOM for mission-critical systems and thin line of systems, in fact, come from the JCS Year 2000 Operational Evaluation Guide, Section 2. USSOCOM is conducting its operational evaluations in accordance with established guidance and is not creating its own terms of reference

h. Pages 11-12, USSOCOM and its Component Command Mission-Critical Systems Identification and Thin Lining, paragraph heading "USSOCOM Reporting of Systems": The first sentence should be deleted It is accurate that the USSOCOM thin line has experienced a number of revisions. However, it is misleading to state that "this could affect the actual number of thin-line systems to be evaluated in the USSOCOM operational evaluation because the Thin-Line System List was used to ensure that each system was included in at least two operational evaluations." USSOCOM operational evaluations have always been focused on the thin line to ensure all thin line systems are evaluated.

i. Page 12, Due Diligence Process for Y2K, paragraph heading "Due Diligence Process for Y2K": Other than requiring a signed certification checklist and test results, the DoD Year 2000 Management Plan does not dictate form, content, or place Y2K documentation will be maintained. It provides the exit criteria for each phase of the program, but does not dictate

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documentary evidence. In the absence of such requirements, USSOCOM evolved its own procedures and documentary standards to help it manage compliance efforts. Prior to November 1998, Program Managers reported their progress to the Y2K Steering Group and presented evidence required to support their position. Based on this evidence, the Steering Group either approved or disapproved the movement of systems through the five-phased program, and reported its findings to the Joint Staff. All documentary evidence of Y2K progress was retained by the Program Manager (PM). In November 1998, the Y2K task force adopted a more stringent procedure of collecting and reviewing Y2K documentation before it was presented to the Steering Group. As part of this new procedure, the task force also began collecting documentation into a central repository, including documentary evidence of phases already approved. This process does not invalidate the earlier decisions of the USSOCOM Steering Group nor does it make the reports to the Joint Staff incorrect. USSOCOM remains firm in its position that the systems have been reported correctly to the Joint Staff. Table 2 seems to indicate that CCI reports the status of systems to the Joint Staff. The CCI document in question was a tally of the Y2K "due diligence" documents that had been collected in the central repository under the new policy. This CCI internal ledger should not be confused with the actual phase of renovation reported to the Joint Staff USSOCOM has one database and one reporting vehicle to the Joint Staff. Only USSOCOM reports the status of systems to the Joint Staff. This section of the audit report should be deleted.

j Page 13, Due Diligence Process for Y2K, paragraph heading "Due Diligence Process for Y2K": The AC-130 Test Bed is compliant and correctly reported to the Joint Staff. The difficulties anticipated in the validation test plan were overcome The plan was retained in its original form for historical purposes

k. Page 18, Integration Testing, Operational Evaluations, and Chairman's Contingency Assessment, paragraph heading "USASOC Integration Testing": In addition to the testing done by the USASOC Technology Application Program Office, USASOC had completed rigorous ground and flight testing to include testing the GPS systems with a GPS stimulator by 12 March 1999. This testing was conducted in conjunction with the 18th Flight Test Squadron and conducted to the same standards as the evaluations conducted for AFSOC aircraft. The statements in the report regarding this testing are misleading.

l. Page 19, Integration Testing, Operational Evaluations, and Chairman's Contingency Assessment, paragraph heading "NAVSPECWARCOM Integration Testing": The reference to the duration of testing, "1 to 2 minutes per date ... 10 minutes ... 30 minutes" is inaccurate Those times refer to the time required to set the various system clocks. Revised

m. Page 20, Integration Testing, Operational Evaluations, and Chairman's Contingency Assessment , paragraph heading "Operational Evaluations": USSOCOM operational evaluations are conducted in accordance with the JCS Year 2000 Operational Evaluation Guide. According to section 3.2.7 of this guide, "The primary objective of the operational evaluation is to validate the information flow for critical missions and tasks using the CINC identified "Thin Line" of critical systems in a Y2K environment." USSOCOM has identified all mission-critical managed systems that are part of the CINC's thin line and will be included in the operational evaluations

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The remaining systems are being evaluated in accordance with the DoD Year 2000 Management Plan requirements to include system renovation and certification and, where appropriate, functional end-to-end tests. There is no requirement for all managed systems to be tested in an operational environment.

5. As the year 2000 approaches, our efforts remain focused on resolving Y2K issues related to our Information Technology (IT) systems. We appreciate the opportunity to provide management comments to the draft of the proposed audit report. My point of contact for Y2K actions is CAPT G.L. Thompson, (813) 828-8189, DSN 299-8189.

RALPH E. SUGGS
Rear Admiral, U.S. Navy
Deputy Commander in Chief

Joint Staff Comments

THE JOINT STAFF
WASHINGTON, DC

Reply ZIP Code:
20318-0300

DJSM-595-99
28 July 1999

MEMORANDUM FOR THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

Subject: Audit Report on Year 2000 Issues Within US Special Operations Command and Its Component Commands (Project No. 9LA-5033)

1. The Joint Staff Operational Evaluation Program encompasses nine missions associated with special operations. USSOCOM will evaluate these missions on behalf of all theater special operations commands during its five scheduled operational evaluations. It will then report the results of these evaluations in accordance with the Joint Staff Operational Evaluation Guide, Version 3.0. Through these reports, the Joint Staff will be informed of the Year 2000 status of the special operations commands.

2. The Joint Staff point of contact for Year 2000 audit actions is Lieutenant Colonel Lucinda Hackman, Joint Staff Year 2000 Office, 697-1207, or lucinda.hackman@js.pentagon.mil.

V. E. CLARK
Vice Admiral, U.S. Navy
Director, Joint Staff

Reference:
1 DOD IG memorandum, 18 June 1999, "Audit Report on Year 2000 Issues Within U.S. Special Operations Command and Its Component Commands (Project No. 9LA-5033)"

Audit Team Members

This report was prepared by the Readiness and Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, DoD. Personnel of the Office of the Inspector General, DoD, who contributed to this report are listed below.

Shelton R. Young
Harlan M. Geyer
Jean M. Jackson-Herrin
Gary K. Smith
Juana R. Smith
Deborah G. DeVries